

## COMMUNITY DIRECTIONS

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# Increasing Student Engagement in Pharmacy Law

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### Abstract

To enhance student engagement and learning, the use of a social media platform, Snapchat, was introduced into a cohort of second year pharmacy students (n=160). This study aims to evaluate student perception of this intervention which was used in a pharmacy law module. Participation in the intervention was voluntary. An evaluation survey was designed to understand usage of the Snapchat tool through tick box responses and comment boxes. The survey was given out and collected at the end of a lecture. The response rate was 55.6%. Of those with an active Snapchat account, 90% (n=63/69) had joined our pharmacy law Snapchat account. When asked whether Snapchat supported revision, 91.9% (n=57/62) agreed whilst 81.0% (n=51/63) reported that the snapchat account had increased their knowledge in relation to pharmacy law and 93.8% (n=60/64) would recommend this learning tool to their peers.

### Introduction

The teaching of pharmacy law is about the application of knowledge into professional practice. To become a pharmacist in the United Kingdom (UK), through the undergraduate route, you must complete a 4 year course to receive an MPharm degree, followed by a 1 year pre-registration placement which includes passing competency based assessments and a written exam prior to registering as a Pharmacist with the General Pharmaceutical Council (GPhC).

Pharmacists work in many areas of healthcare, industry and academia, to name but a few. Pharmacists are responsible for ensuring medicines are safe and legally supplied, in addition to providing advice about medications to patients (GPhC, 2017).

Pharmacy is governed by multiple laws which cover all aspects of medicines, including the manufacture, dispensing and safe supply of medications to the general public. Pharmacy students need to be aware of these laws and be able to safely apply the law into everyday practice to ensure positive outcomes for their patients. As a result of these laws, learning pharmacy law can seem like a daunting task as multiple facts need to be learnt, remembered and applied to practical situations.

The use of digital media is becoming increasingly popular within pharmacy practice and pharmacy education, particularly in the USA. Using digital and social media platform provides pharmacists with an opportunity to use innovative techniques to interact and engage their patients. It can also be used to encourage behavioural changes, thus improving public health (Kayyali & Crilly, 2016).

Active learning has been shown to increase student participation and improve performance. (Freeman et al., 2014) Therefore, an intervention was introduced to a second-year pharmacy cohort (n=160) in the

pharmacy law module, with the intention of enhancing student learning and the application of knowledge. The pharmacy law module already incorporates a number of active learning interventions, for example the use of clicker technology and peer assisted learning. The pharmacy law Snapchat tool was introduced to further enhance the student experience through active learning.

Snapchat is a social media mobile application used by individuals to send photos and videos to contacts in their phone. Once the image is received by a contact, it will remain on their screen for 10 seconds before disappearing. This mobile application has become increasingly popular over the past few years and now has an estimated 100 million users per day, with most users being under 34 years old (Aslam, 2017). Data published by Kingston University reveals 75.3% of students are aged below 25 years; therefore, this mobile application was considered to be an appropriate tool for communicating with the majority of second year pharmacy students (Kingston University, 2016).

The students were made aware of the pharmacy law Snapchat account during their first lecture in September 2016; however, they were under no obligation to join as all the essential information required for summative assessments would be covered during timetabled teaching sessions.

The pharmacy law Snapchat learning tool contains 100+ closed questions, organised by topics, including prescription requirements, controlled drugs and veterinary medicines. During term time, the participating students would receive at least one law question each working day via Snapchat.

Questions requiring short responses were sent on weekdays; (Figure 1) whereas, questions requiring further reading or more detailed answers were sent on Fridays (Figure 2). This provided the students with an opportunity to work on the longer questions over the weekend. In addition, the students were contacted once every four weeks to determine whether there were any topics they would like the Snapchat questions to focus on during the forthcoming weeks. The questions were written based upon student demand,

thus providing some flexibility in the topics covered.

Q6. A patient has insomnia and has run out of zopiclone 7.5mg tablets. **Can you make an emergency supply?**



**Figure 1** An example of a short response question



**Here is one for the weekend.....**

**Write down the SIX legal requirements for a CD Requisition**

**Figure 2** An example of a longer question

Once the students received a question on their mobile device, they could handle the question in several ways. Some students chose to respond to the Snapchat account with their answer, whilst others would take a screenshot of the question; whereas, a small proportion of students would open the question without saving it or responding.

This study aims to evaluate student perception of the social media intervention which was used to increase engagement and knowledge in pharmacy law.

## Methods

An evaluation survey, consisting of eight questions, was designed to understand the usage of the Snapchat tool through tick box questions and comment boxes for qualitative responses.

The survey was distributed to the second year pharmacy students during a Law and Ethics lecture in March 2017. At the start of the lecture, the purpose of the survey was explained to the students. They were also informed that all information provided would remain anonymous. The module leader was the only individual who would have access to the raw data. All students attending the lecture were eligible to complete the survey; however, participation was voluntary and students had the right to withdraw at any point during the survey. Implied consent was given through completion of the surveys. All surveys were collected immediately. Some responders failed to answer all questions.

The raw data from the surveys was input into a software survey tool, Survey Monkey, prior to data analysis. Descriptive statistics, including percentages, were used to quantify the data gathered from the closed questions using Microsoft Excel. Open ended questions were analysed using word counts.

This is a service development evaluation; therefore ethics approval was not required.

## Results

Over half the cohort, 55.6% (n=89/160) completed the Snapchat evaluation survey.

Of the students surveyed, 77.5% (n=69/89) had an active snapchat account and the majority of these students, (90%, n=63/69) had joined our pharmacy law Snapchat account. When asked why they had joined the Snapchat account, 58.7% (n=37/63) explained their rationale for joining. One reason for joining, which was provided by 29.7% (n=11/37) of the students, was that they thought it would be “helpful for revision”.

Slightly fewer students, (24.3%, n=9/37), stated that they joined because they would be asked questions which were “relevant to the module” and a small proportion, 10.8% (n=4/37) joined to “improve their knowledge about the topic”.

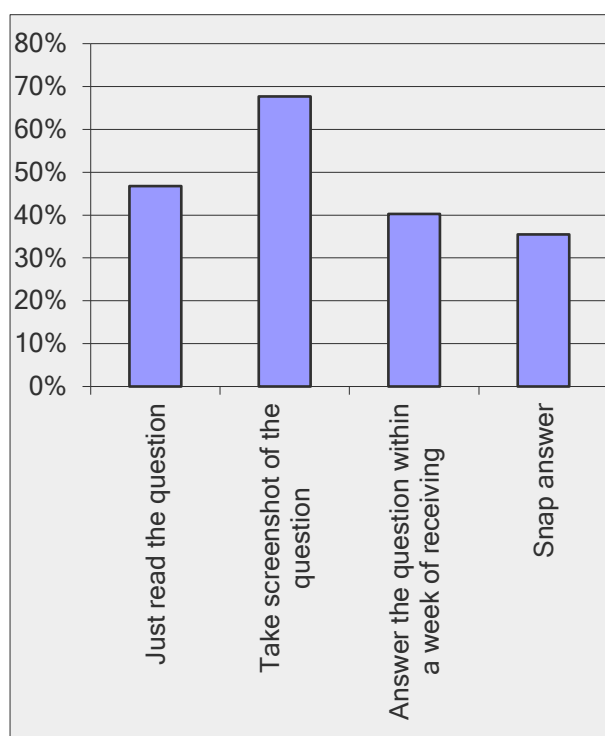
Although most of the cohort had joined the pharmacy law Snapchat account, there were several students who had not joined, despite having active Snapchat accounts. This group of students were asked to share their reasons for not joining. From those who responded, (66.6%, n=4/6) explained that they had “no time to participate” or “they had forgotten to join”.

The second year pharmacy students, who were using the social media tool, were asked further questions to determine which aspects of the pharmacy law Snapchat account they liked the most and whether the tool had supported their learning of the topic throughout the year and during their preparation for exams. Over two thirds of the students, (66.3%, n=59/89) provided information about why they liked the Snapchat learning tool, with 45.8% (n=27/59) commenting that they specifically liked the style of questions. Several students elaborated on their answers by stating that questions were “helpful”, “thought provoking” and “sometimes challenging”. When asked whether the educational tool supported revision, 91.9% (n=57/62) agreed whilst 81.0% (n=51/63) reported that the Snapchat account had increased their knowledge in relation to pharmacy law.

Although the feedback about the educational tool was predominately positive, the students were asked to make suggestions about how the Snapchat tool could be improved for future year groups. Overall, 33 students provided suggestions. Eleven students (33.3%) asked for more questions, whilst five students (15.5%) asked for the answers to the question to be provided. Several students elaborated on their comments and made suggestions about how the answers could be provided, for example posting the answers online after one week or sending the answer via Snapchat 48-72 hours later.

To establish how the students were using the Snapchat tool to enhance their learning, a subsequent question was asked. The students were able to select one or more answer and a total of 62 students answered this question (Figure 3). The preferred method, selected by 67.7% (n=42/62) was to take a screenshot of the question. Almost half of the students, 46.8% (n=29/62) reported that they read the questions; whilst, 35.5% (n=22/62) were sending their answers back to the Snapchat tool. Irrespective of the answers chosen by the students, all options demonstrate student engagement.

The final question in the Snapchat survey asked the students whether they would recommend this learning tool to their friends. Overall, 93.8% (n=60/64) would recommend this learning tool to their peers.



**Figure 3** Student usage of Snapchat for learning purposes

## Summary

At present, pharmacists are using social media to provide information to the general public, about medical conditions, medications and medical devices (for example inhalers). In addition, it is being utilised to promote key public health messages (Wick, 2017). The results from a systematic review, investigating the use of social media in healthcare, have

shown that social media usage among pharmacists is increasing; however, the majority of papers written about this topic are predominantly descriptive (Benetoli et al, 2015). This paper has aims to address the gap in the current literature by providing some quantitative data about the use of social media in pharmacy education.

The results from this short survey show that most of the students engaged with our pharmacy law Snapchat account, with the majority of students reporting that their knowledge about pharmacy law had improved. It is also evident that this tool provided support for the students when they were preparing for their exams. At the time of writing, the data from the end of year exams was not available; therefore, it is not possible to determine whether this learning tool has influenced the overall marks obtained by the students.

Due to this intervention being voluntary, a small proportion of the cohort did not actively engage with the Snapchat account; however, the provision of feedback has identified areas which will be reviewed prior to the tool being implemented with future cohorts. Feedback included the provision of answers and increased coverage of other pharmacy topics.

Further quantitative research into the use of social media in education is required; however, our results show that most students have engaged with our social media intervention, enhancing their knowledge, supporting revision and improving their application of knowledge into practice.

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